

Practical session: RANSAC algorithm for F computation

Objective: Fundamental matrix computation with RANSAC algorithm.

- ▶ Get initial program from the website.
- ▶ Write the core of function `ComputeF`. Use RANSAC algorithm (update N_{iter} dynamically, but be careful of numerical problems with m/n small), based on 8-point algorithm. Solve the linear system estimating F from 8 matches. Do not forget normalization! **Hint:** it is easier to use SVD with a square matrix. For that, add the 9th equation $0^T f = 0$.
- ▶ After RANSAC, refine resulting F with least square minimization based on all inliers.
- ▶ Write the core of `displayEpipolar`: when user clicks, find in which image (left or right). Display this point and show associated epipolar line in other image.